

Anti-IL1 beta Rabbit Monoclonal Antibody
Catalog # ABO13938

Specification

Anti-IL1 beta Rabbit Monoclonal Antibody - Product Information

Application	WB
Primary Accession	P01584
Host	Rabbit
Isotype	Rabbit IgG
Reactivity	Human
Clonality	Monoclonal
Format	Liquid

Description

Anti-IL1 beta Rabbit Monoclonal Antibody . Tested in WB application. This antibody reacts with Human.

Anti-IL1 beta Rabbit Monoclonal Antibody - Additional Information

Gene ID 3553

Other Names

Interleukin-1 beta, IL-1 beta, Catabolin, IL1B (http://www.genenames.org/cgi-bin/gene_symbol_report?hgnc_id=5992 target="_blank">HGNC:5992), IL1F2

Calculated MW

30748 MW KDa

Application Details

WB 1:500-1:2000

Subcellular Localization

Secreted. The lack of a specific hydrophobic segment in the precursor sequence suggests that IL-1 is released by damaged cells or is secreted by a mechanism differing from that used for other secretory proteins.

Contents

Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.

Immunogen

A synthesized peptide derived from human IL1 beta

Purification

Affinity-chromatography

Storage

Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated

freeze-thaw cycles.

Anti-IL1 beta Rabbit Monoclonal Antibody - Protein Information

Name IL1B ([HGNC:5992](#))

Synonyms IL1F2

Function

Potent pro-inflammatory cytokine (PubMed:[10653850](http://www.uniprot.org/citations/10653850), PubMed:[12794819](http://www.uniprot.org/citations/12794819), PubMed:[28331908](http://www.uniprot.org/citations/28331908), PubMed:[3920526](http://www.uniprot.org/citations/3920526)). Initially discovered as the major endogenous pyrogen, induces prostaglandin synthesis, neutrophil influx and activation, T-cell activation and cytokine production, B-cell activation and antibody production, and fibroblast proliferation and collagen production (PubMed:[3920526](http://www.uniprot.org/citations/3920526)). Promotes Th17 differentiation of T-cells. Synergizes with IL12/interleukin-12 to induce IFNG synthesis from T-helper 1 (Th1) cells (PubMed:[10653850](http://www.uniprot.org/citations/10653850)). Plays a role in angiogenesis by inducing VEGF production synergistically with TNF and IL6 (PubMed:[12794819](http://www.uniprot.org/citations/12794819)). Involved in transduction of inflammation downstream of pyroptosis: its mature form is specifically released in the extracellular milieu by passing through the gasdermin-D (GSDMD) pore (PubMed:[33377178](http://www.uniprot.org/citations/33377178), PubMed:[33883744](http://www.uniprot.org/citations/33883744)). Acts as a sensor of *S.pyogenes* infection in skin: cleaved and activated by pyogenes SpeB protease, leading to an inflammatory response that prevents bacterial growth during invasive skin infection (PubMed:[28331908](http://www.uniprot.org/citations/28331908)).

Cellular Location

Cytoplasm, cytosol. Secreted. Lysosome Secreted, extracellular exosome {ECO:0000250|UniProtKB:P10749} Note=The precursor is cytosolic (PubMed:15192144). In response to inflammasome-activating signals, such as ATP for NLRP3 inflammasome or bacterial flagellin for NLRC4 inflammasome, cleaved and secreted (PubMed:24201029, PubMed:33377178, PubMed:33883744). Mature form is secreted and released in the extracellular milieu by passing through the gasdermin-D (GSDMD) pore (PubMed:33883744). In contrast, the precursor form is not released, due to the presence of an acidic region that is proteolytically removed by CASP1 during maturation (PubMed:33883744). The secretion is dependent on protein unfolding and facilitated by the cargo receptor TMED10 (PubMed:32272059)

Tissue Location

Expressed in activated monocytes/macrophages (at protein level).

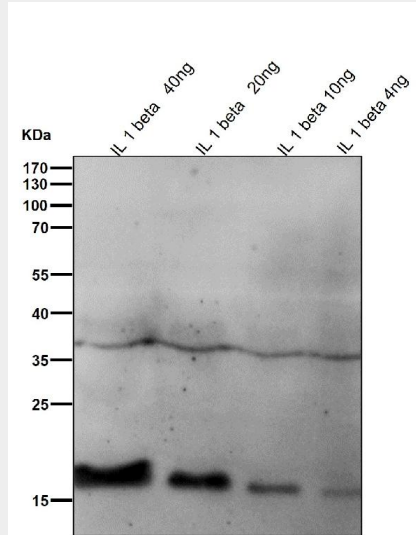
Anti-IL1 beta Rabbit Monoclonal Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

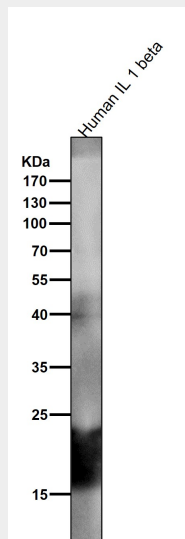
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)

- [Flow Cytometry](#)
- [Cell Culture](#)

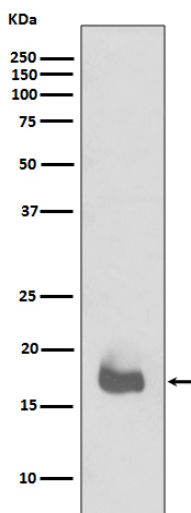
Anti-IL1 beta Rabbit Monoclonal Antibody - Images



All lanes use the Antibody at 1:500 dilution for 1 hour at room temperature.



All lanes use the Antibody at 1:500 dilution for 1 hour at room temperature.



Western blot analysis of IL1 beta expression in recombinant IL1 beta protein.